Operations Files DB Update notes

1/6/11

This file contains the notes that define the changes being made to the .crop files used in WEPS. The date indicates the day that the NRCS Operations XX-XX-XX.zip was issued. All computers using WEPS should always be using the newest version of the crop files, and always do a recursive Update WEPS Management Files (from the MCCREW Mgt editor) as a new set of crops is published. CMZ template managements will be updated and posted as crop files are published. Users can then download the new CMZ template file without doing the update step locally. ALL LOCAL MANAGEMNT MUST BE UPDATED LOCALLY after the new set of files are downloaded.

New posted files will be downloaded to the *C:\Documents and Settings\All Users\Application Data\USDA\WEPS\Databases\NRCS\operations* directory. Leave the file zipped. Then, delete the older dated operations zip file. Lastly, do an Update WEPS Management Files process in the MCCREW editor on all files that will be used again in the future, usually in a local directory such as *C:\Documents and Settings\All Users\Application Data\USDA\WEPS\Databases\NRCS\crops\local OR C:\Documents and Settings\All Users\Application Data\USDA\WEPS\Databases\db\man\NRCS\local.*

NRCS Operations 1-18-11:

Continuous disturbance and smoothing.opn was added to be used in estimating potential soil loss. This operation should not be used in any conservation planning runs.

Sprayer, defoliant, remove leaves.opn: This operation is used to defoliate crops and allow the wind to blow the leaves away. They are removed from the field and not counted in the total residue. Do not use this if the leaves stay on the field over winter. This was added to simulate winter damage to winter crops such as winter wheat. South Dakota winter wheat usually looses it's leaves most winter from blowing snow and cold.

Planter, double disk oprn, 15 inch row spacing.oprn: Added by request.

Stalk chopper, rolling, light disturbance.oprn: Added by request. Rolling Basket Incorporator, typically a component behind combination finishing tools, field cultivators or light tandem finishing disks. Tool levels surface, lightly incorporates fertilizer or chemicals.

Roller, residue incorporator.oprn: Added by request. Smooth roller w/ 3 inch spade lugs used to flatten and hair pin residue into wet soil in a flooded rice field after harvest. Typified by tool known as a "water buffalo" used in southern rice production.

Roller, residue.oprn: Added by request. Smooth roller w/ crimper bars used to kill and flatten covercrops.

Planter, small veg seed, 8x60.oprn, Planter, small veg seed.oprn, Planter, transplanter, vegetable, no-till.oprn, and Planter, tranplanter, vegetable.oprn: Changed the P5 to allow the preexisting ridges and furrows to set the ridge roughness.

All grazing green operations: Changed stem removal to 0 to prevent the stand from thinning. **Add Non-Crop Mulch.oprn:** Adjusted mulch values to match the wood chips on the surface.

Cultivator, between beds, add residue.oprn: Changed mulch values from wood to grain straw.

Shred residue, 4 in ht.oprn: This is a new operation to allow user to select a higher cut height that the 2 in standard Shredder, flail or rotary operation. Similar to the 6 in cut in RUSLE. P42 (inches) used to cut biomass cut to a 4 in ht and leave all biomass in the field. This assumes no flattening for wheel traffic (mostly used in row crops), and does not kill the crop. MAS 1-5-11

Shred residue, 6 inch stubble.oprn: P42 (inches) used to cut biomass cut to a 6 in ht and leave all biomass in the field. This assumes no flattening for wheel traffic (mostly use in row crops), and does not kill the crop. MAS 1-4-11

Shredder, beet topper, 1 in ht.oprn: Flail shredder set to cut tops of crops like sugar beets or carrots. Nearly all the leaves are cut off and spread on the surface leaving the top of the root or tuber exposed. 1-4-11 DTL. This is a new operation needed to be used when removing the tops (flatten to ground) of root crop before harvest. It has a 1 in height setting. All tops stay in the field. MAS 1-4-11

Shredder, flail or rotary, filberts and pecan.oprn: Rotary mower or flail shredder used to chop prunings and brush. Also cuts and flattens existing weed or grass cover. Does not kill cover crop 030303 DTL Rotary mower or flail shredder set to leave 4 inch stubble height. Adds User specified amount (mass) of mulch (woody trimmings). MAS 1-5-11

Shredder, flail or rotary.oprn: P42 is used to set a height of cut and removed the flattening P24. The 0.90 fraction used in RUSLE is by mass. WEPS fraction is by height. It is not the same as RUSLE and cannot be used. Set the height to 2 inches per the conversation the Dave Lightle. He said that most corn shredders are set to 2 inches. Cotton shredding is much higher, use the 6 in shredder. A new operation was also created for root crop defoliation where all of the green tops are flatten to residue without killing the crop, "Shredder, beet topper". Kill crop was removed because of the interference with most harvest operations if used before harvest. MAS 1-5-11

Drill, deep furrow 7 to 10 in spacing.oprn: Corrected an error in the ridge spacing. Sp went from 15 inches to 8.5 inches MAS 1-6-11.

Planter, in-row subsoiler low disturbance: Corrected a typo in the burial rate of Non-Fragile residue. It was 0.3 and now is 0.03. Corrected the spelling in the name also.

Harvest, roses: Added four harvest operations for special management in AZ, Harvest, roses, bare root, 1st, 2nd, 3rd, and 4th.

Prune, roses, machine: Added for special rose management in AZ.

Harvest, dig root crops res. on surf. and Harvest, dig root crops res. buried: This operation was leaving older residue from previous crops standing. This was incorrect. All residue is flattened by digging the root crops.
